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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/402,796	12/22/99	DUPUIS C	05725.0481

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EXAMINER	
WELLS, L	
ART UNIT	PAPER NUMBER
1619	14

DATE MAILED: 10/23/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary	Application No.	Applicant(s)	
	09/402,796	DUPUIS, CHRISTINE	
	Examiner	Art Unit	
	Lauren Q Wells	1619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 August 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claims 16-37 are pending. Claims 1-15 were cancelled by the Preliminary Amendment.

Response to Applicant's Arguments/Amendment

The Applicant's arguments filed August 31, 2001 (Paper No. 13) to the rejection of claims 16-37 made by the Examiner under 35 USC 102, 103, 112, and the judicially created doctrine of double patenting have been fully considered and deemed not persuasive.

Double Patenting Rejection Maintained

The rejection of claims 16-37 under the judicially created doctrine of obviousness type double patenting over claims 1-30 of U.S. Paten No. 6,080,392 and over the claims of copending Application No. 09/265,850, Application No. 09/402,801, and Application No. 09/402,797 is MAINTAINED for the reasons set forth in the Office Action mailed May 2, 2001, Paper No. 11.

Per Applicant's request, this rejection will be held in abeyance until allowable subject matter has been found.

112 Rejection Maintained

The rejection of claims 22, 26, 28, and 29 under 35 U.S.C. 112 is MAINTAINED for the reasons set forth in the Office Action mailed May 2, 2001, Paper No. 11, and those found below.

(i) The phrase "obtained from" in claims 22, 26, 28 and 29 is vague and indefinite, as it is confusing. For example in claim 22, does obtained from mean that the unit is an extract of the listed acids or does it mean that it is one of the acids. The rejection can be overcome by replacing the phrase "obtained from" with the phrase "selected from the group consisting of" or equivalent language.

(ii) The Markush language rejection over claims 22-29 is hereby withdrawn.

102 Rejection Maintained

The rejection of claims 16-19, 21-23, 25-29, 35 and 37 under 35 U.S.C. 102(e) as being unpatentable over Dupuis et al. (6,080,392) is MAINTAINED for the reasons set forth in the Office Action mailed May 2, 2001, Paper No. 11, and those found below.

Applicant argues that "Dupuis does not teach at least one nonionic amphiphilic associative polyurethane corresponding to formula (I). . .as presently claimed". This argument is not persuasive. While formula (IV) of Dupuis teaches R and R' as identical or different C8-C18 hydrocarbon radicals, Dupuis also teaches this range as a preferable embodiment (Col. 2, lines 36-37) and teaches X (Col. 11, line 28), which corresponds to R and R', as a hydrophobic radical, which encompasses the teachings of the instant invention.

103 Rejection Maintained

The rejection of claims 20, 24, 30-34 and 36 under 35 U.S.C. 103(a) as being unpatentable over Dupuis in view of Cauwet (5,478,562) and Prencipe (5,385,729) in further view of Carey (Organic Chemistry) is MAINTAINED for the reasons set forth in the Office Action mailed May 2, 2001, Paper No. 11, and those found below.

Applicant argues that "an alkyl group comprising 1 to 6 carbons is not an adjacent homologue to an alkyl group comprising 8 carbons" and that "this is in stark contrast to the primary reference which only teaches that either of its substituents should be alkyl group having from 8 to 18 carbons. There is no suggestion in the primary reference that one of the substituents have an entirely different range of carbons present in the alkyl group". This argument is not persuasive, as the compound of the instant invention and that of the prior art can be characterized

as a homologous series. A homologous series is defined by Harcourt's Academic Press Dictionary of Science and Technology as *a series of organic compounds whose structure differs regularly by some radical, usually CH2, with each successive member having an additional radical and having a graded change in properties.* Thus, the instant compound and that of the prior art constitute a homologous series.

Again, The CCPA has defined a homologous series as a family of chemically related compounds, the composition of which varies from member to member by CH2 (one atom of carbon and two atoms of hydrogen) *In re Coes, Jr.* (CCPA 1949) 173 F2d 1012, 81 USPQ 369. The Court of Appeals for the District of Columbia applied a ***broader definition*** and defined a homolog (or homologue) as a member of a series of compounds in which each member differs from the next member by a constant number of atoms. *Comr. Pats. V. Deutsche Gold-und-Silber, etc.* (CADC 1968) 397 F2d 656, 157 USPQ 549.

The "Hass-Henze Doctrine" evolved from three CCPA cases, viz., *In re Hass et al.* (CCPA 1944) 141 F2d 122, 127, 60 USPQ 544, 548; and *In re Henze* (CCPA 1950) 181 F2d 196, 85 USPQ 261. In the *Henze* decision, the Court said:

> [T]he nature of homologues and the close relationship the physical and chemical properties of one member of a series bears to adjacent members is such that a presumption of unpatentability arises against a claim directed to a composition of matter, the adjacent homologue of which is old in the art. ***The burden is on the applicant to rebut that presumption by a showing that the claimed compound possesses unobvious or unexpected beneficial properties not actually possessed by the prior art homologue.***

It is immaterial that ~~the~~ the prior art homologue may not be recognized or known to be useful for the same purpose or to possess the same properties as the claimed compound.

The Court concluded that because the characteristics normally possessed by members of a homologous series are principally the same, varying gradually from member to member, chemists knowing the properties of one member of a series would in general know what to expect in adjacent members so that a mere difference in degree is not the marked superiority which will ordinarily remove the unpatentability of adjacent homologues of old substances. Contra, where no use for the prior art compound is known. *In re Stemniski* (CCPA 1971) 444 F2d 581, 170 USPQ 343, and cases cited therein.

In the absence of unexpected results the compound of the instant invention is deemed obvious.

The Applicant argues that "Cauwet et al. does not overcome the deficiencies of Dupuis et al." and that "Prencipe et al. does not overcome the deficiencies of Dupuis et al. and Cauwet et al." and that "Carey does not overcome the deficiencies of Dupuis et al., Cauwet et al., and Prencipe et al.". This argument is not persuasive. Cauwet et al. was relied upon for its teachings of ratios of nonionic to anionic polymers. Prencipe et al. was relied upon for its teachings of specific phosphonic acids. Carey was relied upon for its teachings of condensation reactions. Thus, none of these teachings were used to reject the compound of formula (I).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lauren Q Wells whose telephone number is (703) 305-1878. The examiner can normally be reached on M-F (7-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diana L Dudash can be reached on (703) 308-2328. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4556 for regular communications and (703) 308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.

lqw
October 4, 2001

DAMERON L. JONES
PRIMARY EXAMINER